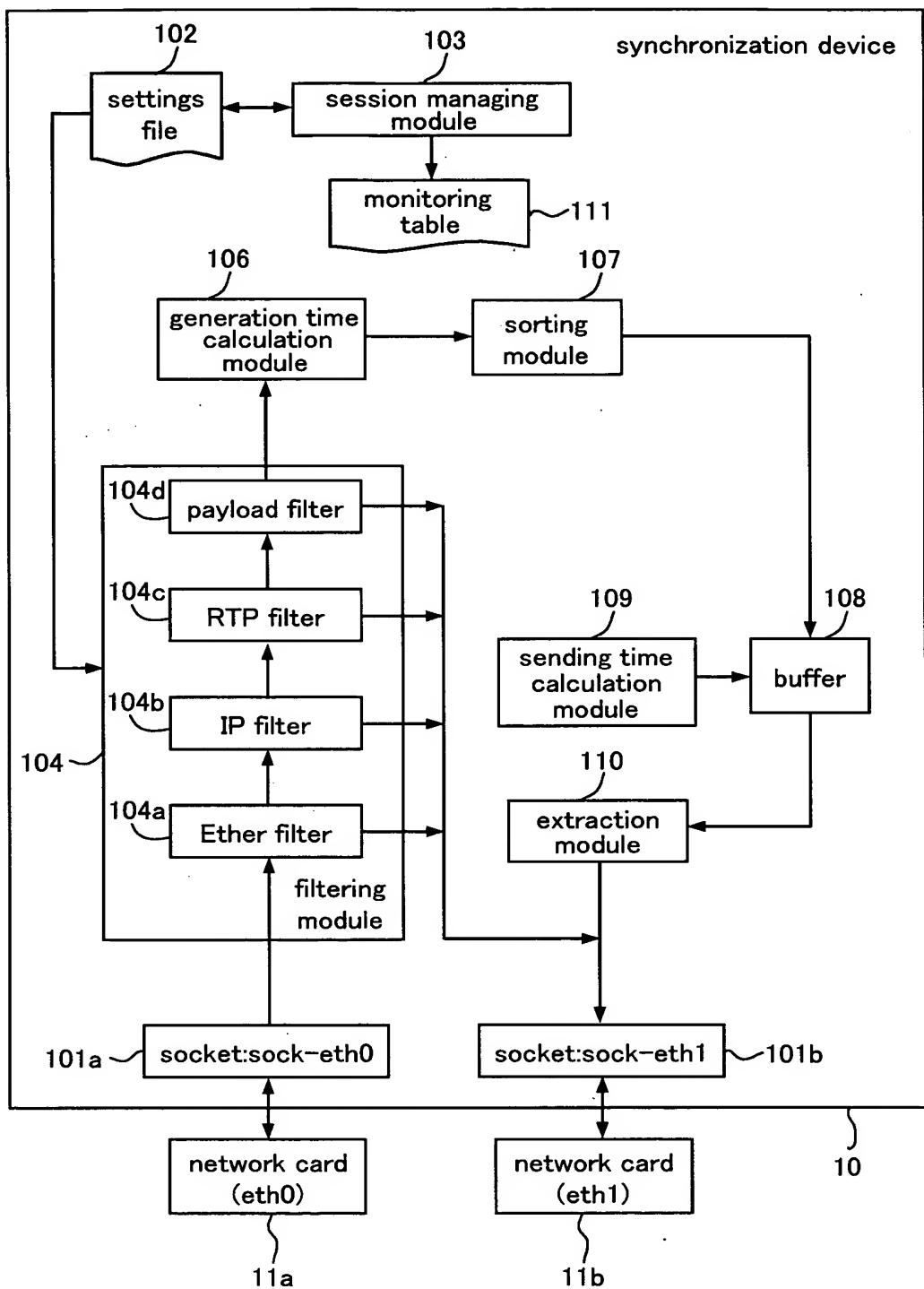


*Fig. 1*



*Fig. 2*

```
# Group_1 Settings
Group_1_Name: English Conversation Class
Group_1_Comment: Flow Group for English School
# Source Specification
Group_1_Src: 12.345.678.910, 6970, 96
Group_1_Src: 12.345.678.910, 8090, 97
Group_1_Src: 98.765.432.198, 6970, 96
Group_1_Src: 98.765.432.198, 8090, 97
# Destination Specification
Group_1_Dst: 56.789.123.456, 6974, 96
Group_1_Dst: 56.789.123.456, 6972, 97

# Group_2 Settings
.
```

*Fig. 3*

<input type="button" value="New"/>	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>	<input type="button" value="http://localhost/admin/"/>
<h3>Synchronization System</h3> <h4>Flow Group</h4>			
Group Name	Comment / Explanation		
English Conversation	Group of AAA English School	<input type="button" value="Select"/>	<input type="button" value="Delete"/>
Tutoring (Math)	Group of Math Class at BBB Private Tutoring School	<input type="button" value="Select"/>	<input type="button" value="Delete"/>
Tutoring (Physics)	Group of Physics Class at CCC Private Tutoring School	<input type="button" value="Select"/>	<input type="button" value="Delete"/>
New Group	Group Name <input type="text"/>	<input type="button" value="Create"/>	
	Comment <input type="text"/>		

*Fig. 4*

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<a href="http://localhost/admin/group1">http://localhost/admin/group1</a>
<b>Synchronization System Settings</b>				
<b>Source Specifications</b>				
IP Address	Port Number	Payload Type		
12.345.678.910	6970	audio ( uLaw )	<input checked="" type="checkbox"/>	<input type="button" value="Change"/>
12.345.678.910	8090	video ( Mpeg4 )	<input checked="" type="checkbox"/>	<input type="button" value="Change"/>
98.765.432.198	6970	audio ( uLaw )	<input checked="" type="checkbox"/>	<input type="button" value="Change"/>
98.765.432.198	8090	video ( Mpeg4 )	<input checked="" type="checkbox"/>	<input type="button" value="Change"/>
			<input checked="" type="checkbox"/>	<input type="button" value="Add"/>
<b>Destination Specifications</b>				
IP Address	Port Number	Payload Type		
56.789.123.456	6974	audio ( uLaw )	<input checked="" type="checkbox"/>	<input type="button" value="Change"/>
56.789.123.456	6972	video ( Mpeg4 )	<input checked="" type="checkbox"/>	<input type="button" value="Change"/>
			<input checked="" type="checkbox"/>	<input type="button" value="Add"/>

*Fig. 5*

111

Source IP Address	Port Number
12.345.678.910	6970
12.345.678.910	8090
98.765.432.198	6970
98.765.432.198	8090

*Fig. 6*

preamble	destination address	source address	type	data	FCS
----------	---------------------	----------------	------	------	-----

*Fig. 7*

version	header length	service type	packet length	
identifier		flag		fragment offset
time to live	protocol	header checksum		
source IP address				
destination IP address				
options		padding		
IP data				

*Fig. 8*

SourcePort	DestinationPort
Length	Checksum
Data Main Portion	

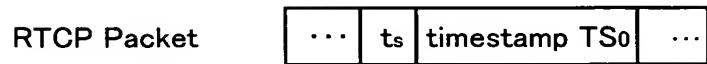
*Fig. 9*

V	P	X	CC	M	PT	Sequence Number
RTP Timestamp (timestamp)						
Synchronization Source Identifier (SSRC)						
Application Data						

*Fig. 10A*

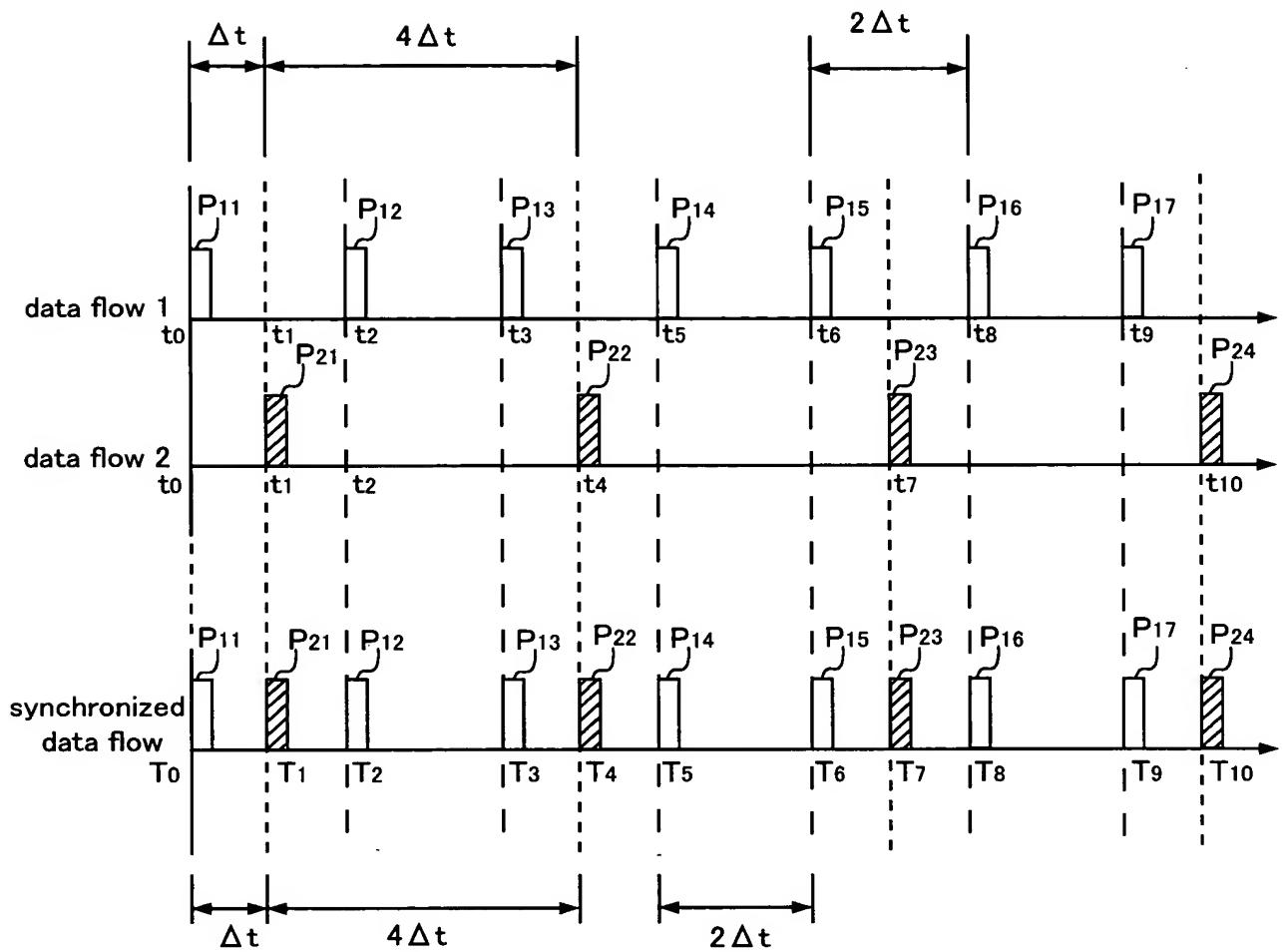
V	P	RC	PacketType(200)	Length				
Synchronization Source Identifier (SSRC)								
NTP Timestamp								
RTP Timestamp								
Number of Sent Packets								
Number of Sent Bytes								
Synchronization Source Identifier of Source								
Fraction Lost	Cumulative Number of Packets Lost							
Highest Sequence Number Received								
Interarrival Jitter								
Time of Last Sender Report Packet								
Time Since Last Sender Report Packet								

*Fig. 10B*

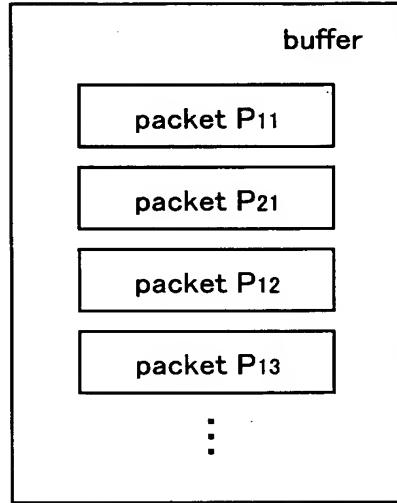


$$t_i = t_s + \frac{TS_0 - TS_i}{\text{number of clock cycles}} \quad \dots(1)$$

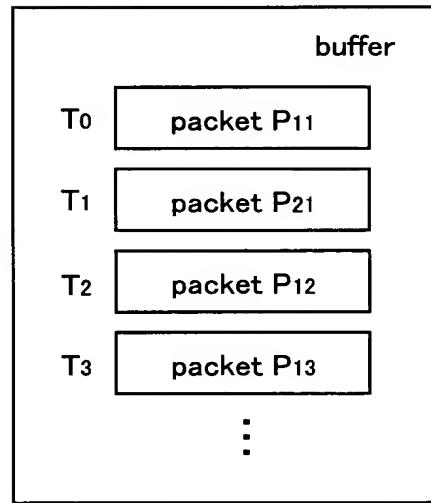
*Fig. 11*



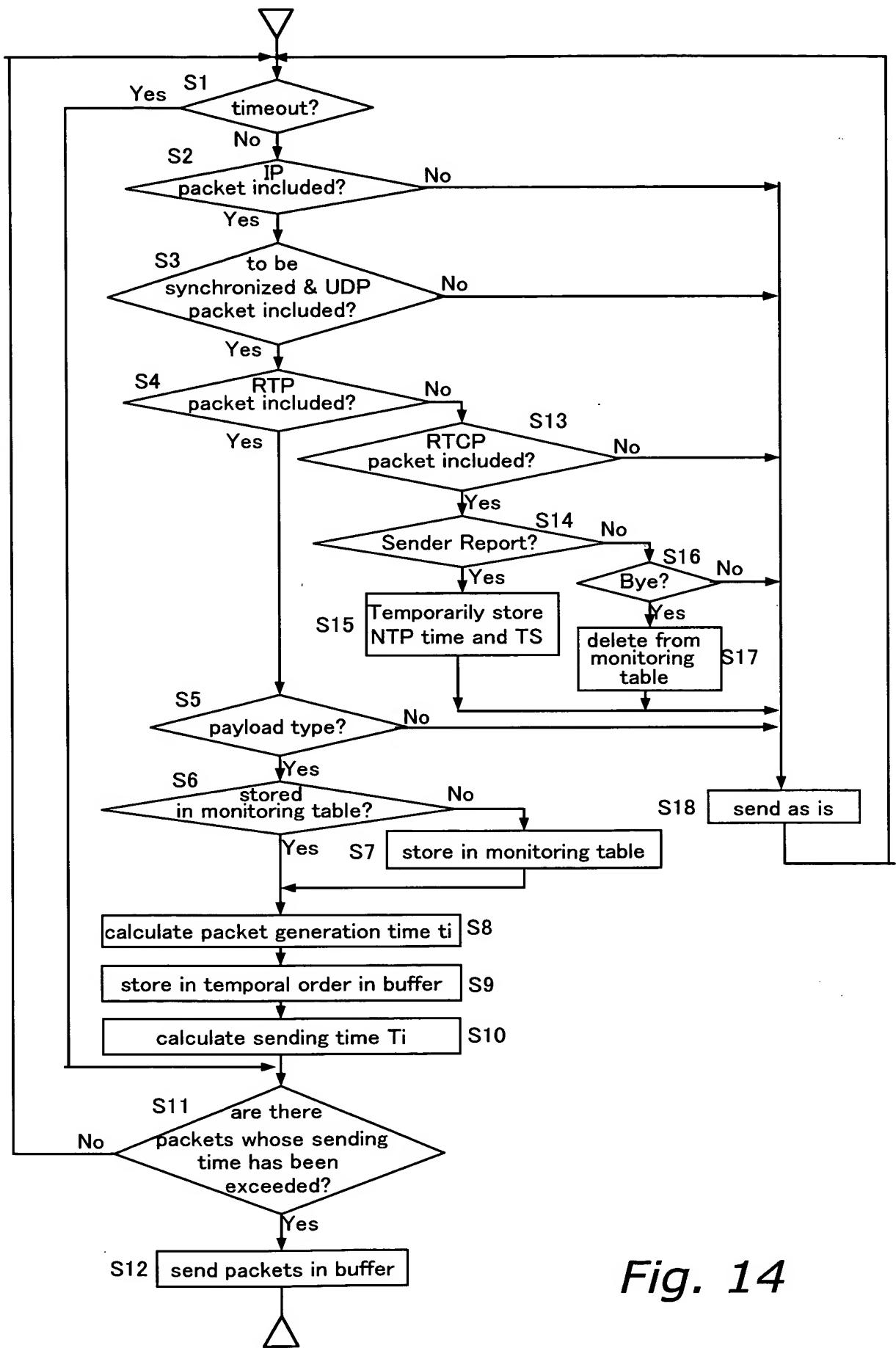
*Fig. 12*



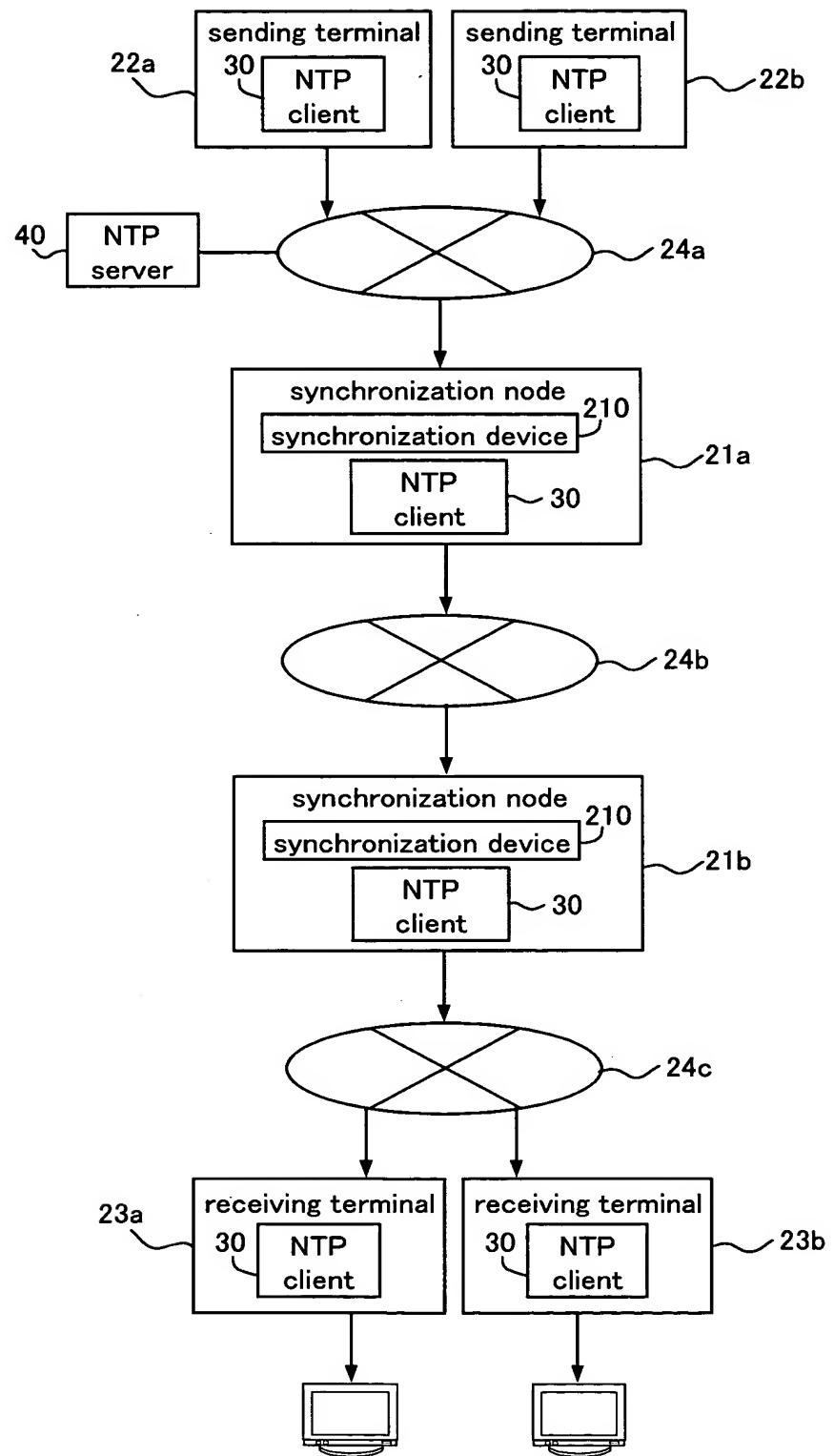
*Fig. 13A*



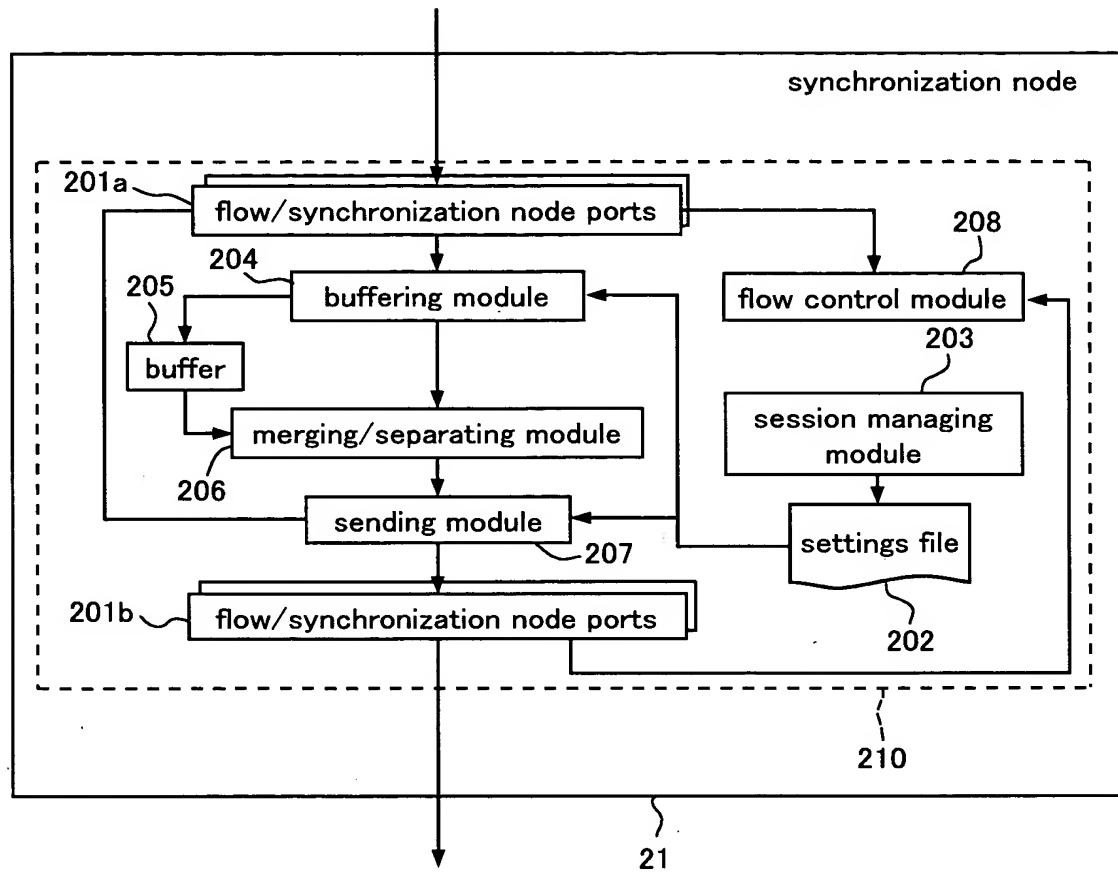
*Fig. 13B*



*Fig. 14*



*Fig. 15*



*Fig. 16*

```
# Group_1 Settings
Group_1_Name: English Conversation Class
Group_1_Comment: Flow Group for English School
# Source Specification
Group_1_Dst: 12.345.678.910, 6970, 1
Group_1_Dst: 12.345.678.910, 6972, 2
Group_1_Dest: 98.765.432.198, 6970, 3
# Settings of Receiver Location
Group_1_Rcv: 8002, 11
Group_1_Rcv: 8004, 12
Group_1_Rcv: 8006, 13
# Merged Data Flow Destination
Group_1_Mix_Dst: 56.789.123.456, 8000
# Merged Data Flow Receiver Location
Group_1_Mix_Rcv: 8000

# Group_2 Settings
.
```

*Fig. 17*

    <http://localhost/admin/>

### Synchronization System

#### Flow Group

Group Name	Comment / Explanation	
English Conversation	Group of AAA English School	<input type="button" value="select"/> <input type="button" value="delete"/>
Tutoring (Math)	Group of Math Class at BBB Private Tutoring School	<input type="button" value="select"/> <input type="button" value="delete"/>
Tutoring (Physics)	Group of Physics Class at CCC Private Tutoring School	<input type="button" value="select"/> <input type="button" value="delete"/>

New Group    Group Name   
 Comment

*Fig. 18*

A screenshot of a web browser window titled "Synchronization System Settings". The URL is "http://localhost/admin/group1". The page contains several tables for managing network settings.
   
**Destination Settings**  

IP Address	Port Number	Flow ID	
12.345.678.910	6970	1	<input type="button" value="Change"/> <input type="button" value="delete"/>
12.345.678.910	6972	2	<input type="button" value="Change"/> <input type="button" value="delete"/>
98.765.432.198	6970	3	<input type="button" value="Change"/> <input type="button" value="delete"/>
			<input type="button" value="Add"/>

  
**Receiver Location Settings**  

Port Number	Flow ID	
8002	11	<input type="button" value="Change"/> <input type="button" value="delete"/>
8004	12	<input type="button" value="Change"/> <input type="button" value="delete"/>
8006	13	<input type="button" value="Change"/> <input type="button" value="delete"/>
		<input type="button" value="Add"/>

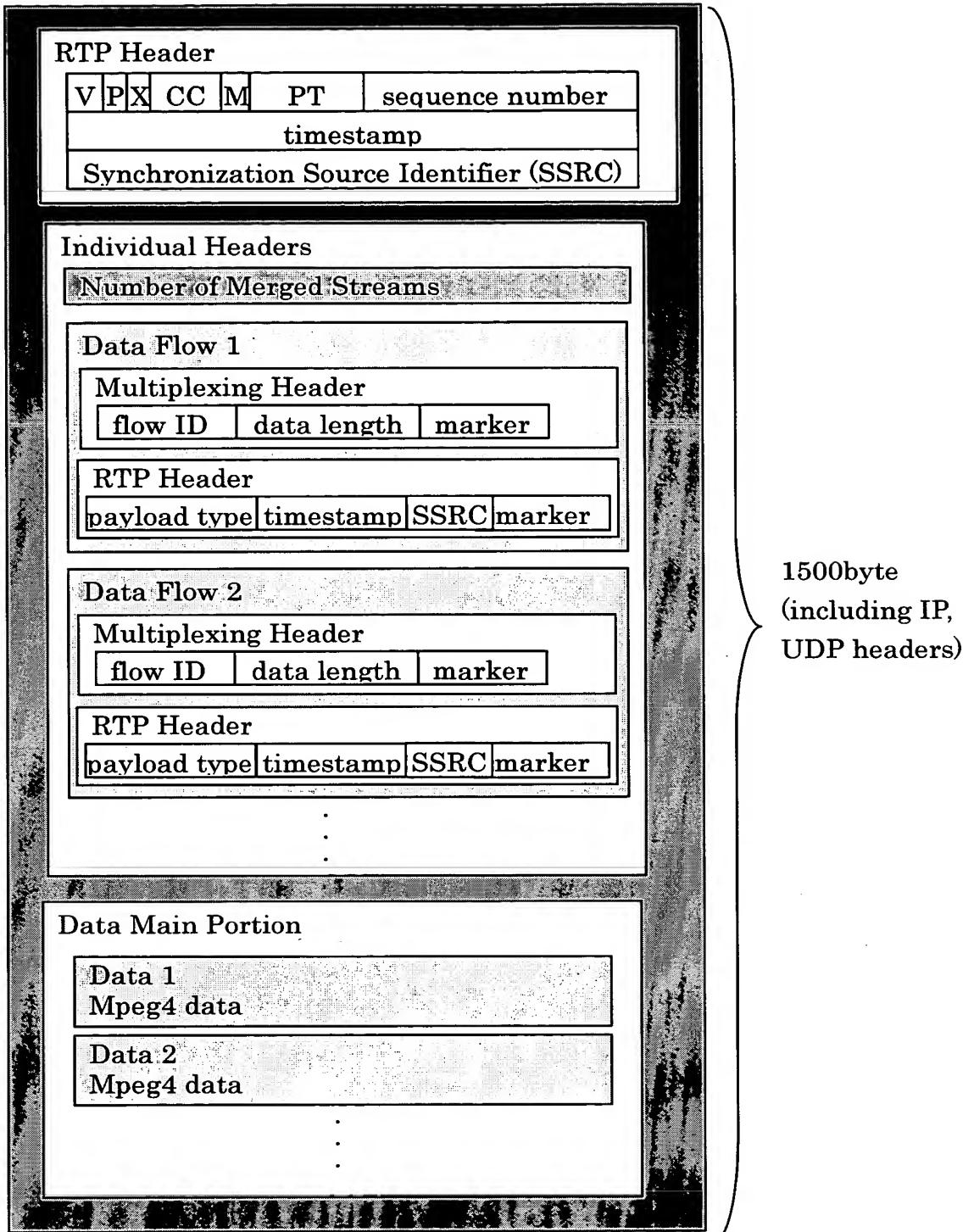
  
**Merged Data Flow Destination Settings**  

IP Address	Port Number	
56.789.123.456	8000	<input type="button" value="Change"/> <input type="button" value="Clear"/>

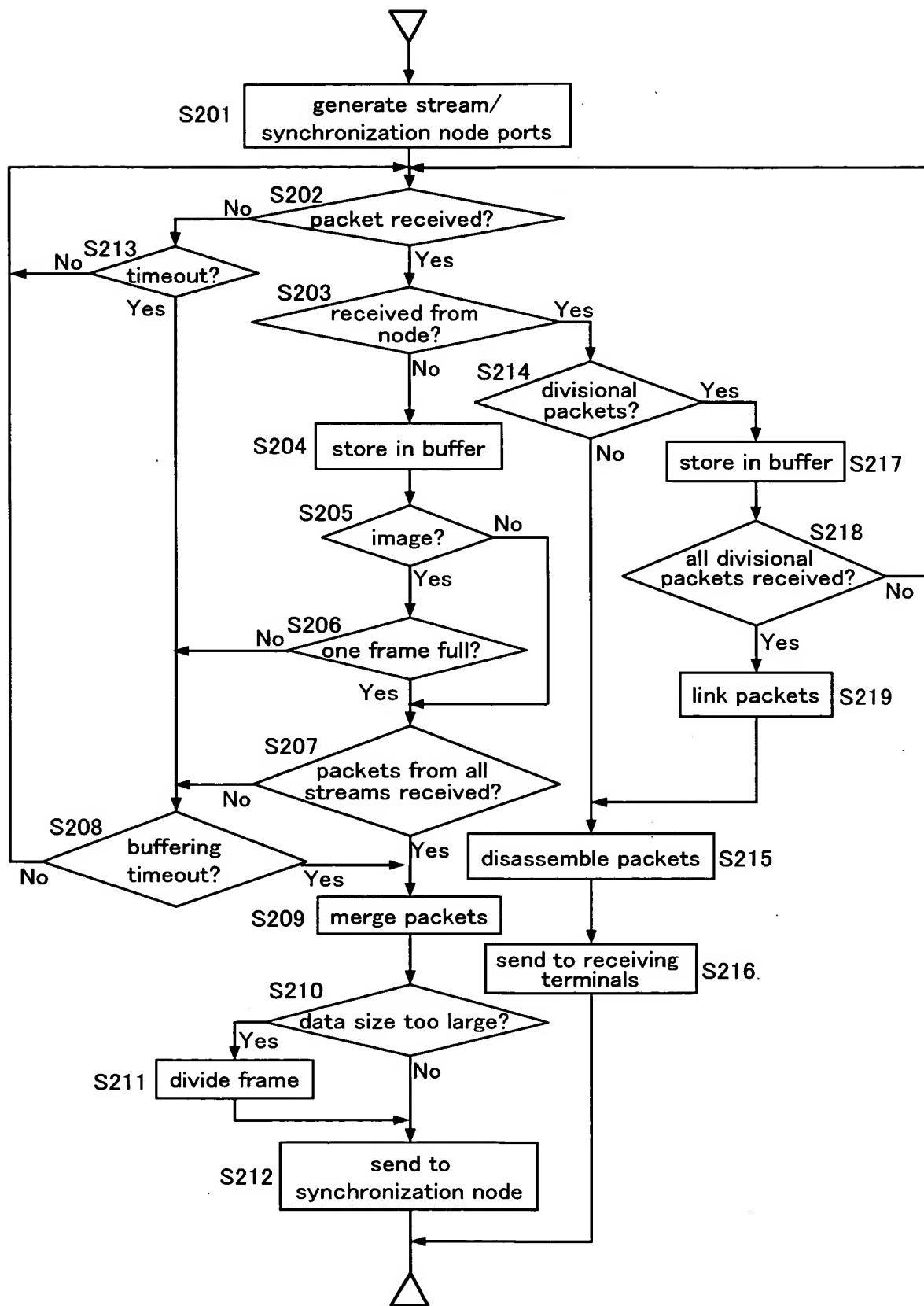
  
**Merged Data Flow Receiver Location Settings**  

Port Number	
8000	<input type="button" value="Change"/> <input type="button" value="Clear"/>

*Fig. 19*



*Fig. 20*



*Fig. 21*